

Aims: Current donor organ scarcity has necessitated increased utilization of 'marginal' livers, including those from donation after circulatory death (DCD) donors. Liver transplantation is a potential treatment for hepatocellular carcinoma (HCC), but it remains unclear how outcomes compare in patients who receive organs from DCD donors versus more 'optimal' organs from donation after brain death (DBD) donors.

Methods: Patients with HCC who received a first liver-only transplant in Cambridge between 01/01/08 and 31/12/11 were identified from a prospectively-maintained database. Recipient demographics, including age, donor type and UKELD score were recorded. Patient survival was calculated from time of transplant with death defined as the endpoint.

Results: 270 liver transplants were performed during this period: 47 from DCD and 223 from DBD donors. 15 transplants from DCD donors (31.9%) were for patients with HCC, compared to 40 (17.9%) from DBD donors ($p=0.0446$; two-tailed Fischer's exact test). Kaplan-Meier survival analysis revealed no difference in three year survival ($p=0.174$).

Conclusions: Patients with HCC receive a greater proportion of DCD livers, which may represent an inherent organ allocation bias. Despite the perceived marginality of DCD livers, there was no significant difference in survival between HCC patients that received a transplant from DCD or DBD donors.

TRAUMA / EMERGENCY SURGERY

0010: ARE PLAIN RADIOGRAPHS USEFUL IN ACCURATELY CLASSIFYING DISTAL RADIUS FRACTURES?

Scott Evans, Annika Taithongchai, Bhuvneswar Machani, Michael David. *City and Sandwell Hospital NHS Trust, Birmingham, UK.*

Objectives: Does assessment of plain wrist radiographs alone accurately depict the fracture pattern found intra-operatively.

Methods: All closed adult distal radius fractures over a six month period that underwent open reduction, internal fixation (ORIF) included. Pre-operative wrist radiographs reviewed by the senior surgeon. Classified using Frykman and AO methods. The same methods were used to classify the fracture pattern intra-operatively. Pre- and intra- operative classifications then compared.

Results: 24 wrists identified; 16 female and 8 male. Mean patient age was 51.0 years. All patients underwent ORIF using a volar approach to the distal radius. Only 3 patients' pre- and intra- operative classifications matched. There was consistent pre-operative under estimation of the degree of fracture comminution and intra-articular involvement. Mean discordance of 3 grades in the fracture classification pre- and intra- operatively when using both the Frykman and AO methods.

Conclusion: This study shows that the use of plain wrist radiographs to classify distal radius fractures is difficult. Intra-articular fractures or those with significant comminution are often under-estimated pre-operatively. The use of pre-operative CT scanning in distal radius fractures where plain radiographs are difficult to interpret will enable surgeons to plan operative time appropriately and aid their choice of implant.

0045: SHOULD PATIENTS REQUIRING SCROTAL EXPLORATION FOR TESTICULAR TORSION BE EXPLORED BY GENERAL SURGEONS OR UROLOGISTS? OUR EXPERIENCE IN A DISTRICT GENERAL HOSPITAL

Rajdeep Bilkhu, Abdullah Ewas, Irshad Shaikh, Samer Doughan. *Queen Elizabeth the Queen Mother Hospital, Margate, Kent, UK.*

Aim: Testicular torsion is an emergency requiring urgent surgical intervention. Due to centralisation of urology services, it may be necessary for general surgeons to intervene. As testicular torsion is a urological diagnosis, should surgery be performed exclusively by urological surgeons? The aims of this study were to analyse the results of scrotal exploration performed by general surgeons including diagnostic accuracy, time to theatre and complications.

Methods: We reviewed hospital records of patients who underwent scrotal exploration by general surgeons at a district general hospital in South East England over 4 years. The data collected included the diagnosis at scrotal exploration; complications; the time from the onset of symptoms and the time to theatre from Accident and Emergency (A&E).

Results: Our results show that patients with suspected testicular torsion are being managed appropriately at our hospital, with an average time of

4.6 hours from A&E to theatre. 30% of patients had confirmed testicular torsion. One patient had a documented complication.

Conclusion: Despite the fact patients are being managed appropriately in our hospital, the potential benefits of having these patients managed at a urological centre have been highlighted. These include the availability of theatres and appropriate further management should orchidectomy be required.

0056: EMERGENCY STOMAS: RISING TO NEW HEIGHTS

Kerry Burke¹, Chris Robinson², Anthony James¹, Kumaran Thiruppathy², Steven Snooks². ¹Barts and the London School of Medicine and Dentistry, London, UK; ²King George Hospital, Essex, UK.

Aim: With the recent promotion of primary anastomosis and the use of alternative bridging procedures, emergency stoma formation is thought to be declining. We investigated the rate of emergency stoma formation in a district general hospital and the complications and mortality associated with these stomas.

Method: This was a retrospective study, based on a prospectively compiled data base, looking at all stoma patients over a 10 year period at a district general hospital in Essex. Data on 690 patients was collated using patient records.

Results: The majority of the stomas included in the study were formed in the emergency setting (65%). Of these, the commonest operation was Hartmann's procedure (31%) and the commonest indication for surgery was colorectal carcinoma (42%). Over the 10 year period, there was an increase in the formation of emergency stomas from 38 to 53 stomas per year. No significant difference in complication rates was seen between elective and emergency patients ($p=0.7061$). Only 22% of all the emergency stomas were reversed.

Conclusions: Emergency stoma formation has increased over the 10 year period, and this incline shows no sign of subsiding. This may reflect an ageing population and the high prevalence of patient co-morbidities.

0085: 'NATIONAL CONFIDENTIAL ENQUIRY INTO PATIENT OUTCOME AND DEATH (NCEPOD) TIMESCALES OF INTERVENTION': ARE WE ADHERING TO NATIONAL GUIDELINES?

Sheena Patel, Janindra Warusavitarne. *Northwick Park Hospital, London, UK.*

Aim: The 'NCEPOD Timescales of Intervention' guidelines categorises operation priorities to enhance clinical governance, by improving patient experience, planning, communication and use of resources. This audit assesses adherence of these national guidelines within a busy North-West London hospital.

Methods: A retrospective review of 60 consecutive CEPOD bookings was performed. Target maximum timescales for intervention from booking to operation start are: Category-1: acute life-threatening emergencies (30-minutes); Category-2: emergent, but not immediately life-threatening (3-hours); Category-3: urgent (6-hours); Category-4: semi-urgent (18-hours), Category-5: less urgent (24-hours).

Results: 85% of bookings achieved targets. 16 cases were 'out-of-hours' (18:00-08:00), of which 13 met intervention targets. Three of the out-of-hours operations would still have met targets if delayed until 08:00. Mean ward-to-anaesthetic room transfer time and anaesthetic induction times were 38 and 10 minutes respectively. All seven operations performed after 21:00 were by Registrars. 44% of procedures between 18:00-21:00 were performed by Consultants.

Conclusion: Adherence to NCEPOD guidelines is achievable, even in a busy setting. Improving awareness within the multidisciplinary team aims to reduce delays in patient transfer. Operating out-of-hours, with reduced resources and support is associated with greater morbidity and mortality. Furthermore, delaying lower priority procedures to daylight hours could increase training opportunities.

0088: WHITE CELL COUNTS, C-REACTIVE PROTEIN AND APPENDICITIS – WHAT IS THE ROLE OF PRE-OPERATIVE BLOOD TESTS IN ASSISTING IN THE DIAGNOSIS?

Adam Tucker¹, Keren Sloan¹, Ian Garstin¹, Stephen Dace¹, Rejina Varghis². ¹Antrim Area Hospital, Antrim, UK; ²CRSC, Belfast, UK.

Introduction: Appendicectomy accounts for approximately 10% of all emergency surgical procedures. Diagnosis is often clinical, however blood markers are often used as an adjunct. A retrospective review of practice was undertaken in order to assess the efficacy of pre operative White cell

counts (WCC) and C-Reactive Protein levels in patients with suspected appendicitis.

Methods: A retrospective review of all appendectomy procedures at a single district general hospital from January 1st 2009, to December 31st 2009. All patients included had their definitive histological diagnosis, pre-operative WCC and CRP levels recorded. They were subsequently grouped by histology into “normal,” “acute,” and “complicated”

Results: A total of 227 patients (192 acute, 49 complicated) with a male preponderance, underwent open appendectomy. Pre-operative WCC was elevated in both acute ($p=0.0328$) and complicated ($p=0.026$) appendicitis, whilst CRP was significantly raised in complicated appendicitis ($p=0.0021$) but not in acute ($p=0.4959$), compared to a normal reference group. False positive rate of 29.5% was observed in female patients.

Conclusion: A raised WCC is more indicative of appendicitis. Significant CRP levels would suggest complicated disease. Negative appendectomy rates remain high, especially in females, and this may emphasise the need for radiological adjuncts to diagnosis, or advocate laparoscopic surgical intervention.

0136: EVOLVING THE CONSENTING PROCESS: STEP 2 – RAISING STANDARDS

Omer Salar, Amanjeet Dahaley, Stephen Ridley, Jaber Al-Shukri, Jomy Kurian. *Kings Mill Hospital, Sutton-In-Ashfield, UK.*

Background / Introduction: Following Step 1 of this audit, the above authors designed and trialed a consent training document to improve orthopaedic consenting standards following recommendations from the Care quality commission (CQC) report in July 2011. Step 2 aims to assess the impact of this document.

Method: A consent training document was designed in collaboration with the clinical audit department. One month (July 2012) after introduction via email, intranet posting and a teaching session; using the same 16 criteria trust designed audit template, 50 consent forms were analysed and data compared to 3 previous years' data.

Results: Following the introduction of the consent training document standards rose significantly. 9 criteria achieved 100% compliance, compared to only 2 criteria without the document (May 2012) ($p<0.0001$). Pre-CQC, 7 and 8 criteria in 2010/11 and 2009/10 achieved this standard. 80-99% compliance was achieved by 6 (July 2012), 9 (May 2012), 5 (2010/11) and 6 criteria respectively (2009/10).

Discussion/Conclusion: Introduction of the consent training document resulted in a significant improvement in consenting standards, benefitting patients but also educating doctors on evolving clinical governance issues. We aim to assess the long term impact of this document by re-auditing in 12 months.

0158: DIAGNOSTIC LAPAROSCOPY IN THE MANAGEMENT OF LOWER ABDOMINAL PAIN IN FEMALE PATIENTS PRESENTING ON AN ACUTE SURGICAL TAKE

S.L. Lockwood, A. Zafar, B.P. Dromey, J.E. Hartley. *Castle Hill Hospital, Hull, UK.*

Aims: Right sided abdominal pain is a common cause of acute surgical admission. The aim of this audit was to review the role of laparoscopy in the management of acute lower abdominal pain in female patients.

Methods: A retrospective audit of ‘diagnostic’ laparoscopic procedures performed by the acute surgical unit from 2011-2012 was undertaken. All female adult patients undergoing emergency diagnostic laparoscopy were identified. Patients were excluded if the laparoscopy was for post operative complication or if appendicitis or other enteric pathology was identified.

Results: 145 ‘diagnostic’ laparoscopies in adult females were undertaken over a 20month period. 81 patients met the inclusion criteria. 59 patients had undergone preoperative USS. Laparoscopy was normal in 18 patients (22%), 63 (78%) had tubo-ovarian pathology, which was identified in only 15 (23%) on USS. The overall median total length of hospital stay was 2.9days, (range 1-7). However median length of stay following diagnostic laparoscopy and washout was 1.1days, (range 0-5). No complications were noted within the study group.

Conclusions: Diagnostic laparoscopy for acute RIF pain in females is safe and associated with improved diagnostic rates over USS. Earlier laparoscopy in this group of patients may reduce hospital stay and overall hospital costs.

0168: THE MANY DANGERS OF MANGO TREES

Geoffrey Roberts. *St Francis' Hospital, Katete, Eastern Province, Zambia.*

Aim: The humble mango tree (*Mangifera indica* L.), does not strike the casual observer as likely to be one of the leading causes of surgical morbidity in rural Zambia. The author demonstrates its significance through several striking examples.

Methods: A six month observational study at a rural Zambian mission hospital with a catchment population of 1.4 million.

Results: Presenting complaints are divided into traumatic and non-traumatic. Traumatic presentations included fractures (supracondylar humerus, femoral shaft, forearm and skull), head injuries and rupture of the spleen. Non-traumatic complications related to surgical intervention for bowel obstruction. Indigestible mango fibres are found on decompressing the bowel during laparotomy for small and large bowel obstruction. They obstruct most suction devices and possibly complicate the disease process of adhesional small bowel obstruction and sigmoid volvulus.

Conclusions: Mangos form a staple part of the diet of Eastern Province, Zambia, from October to January. Often the most succulent fruit is found in the highest branches and children are to be found several metres up, dropping fruit to their families. The presence of loose branches, snakes and the technique of shaking mangos loose all result in falls and injuries. The large fibre load adds challenges to emergency abdominal surgery.

0196: THE ADEQUACY OF CERVICAL SPINE IMAGING IN THE TRAUMA PATIENT

Gopikanthan Manoharan, Thomas Moores, Nazmul Mian, Rohit Singh. *Shrewsbury and Telford NHS Trust, West Midlands, UK.*

Aims: To determine the adequacy of cervical spine imaging in the trauma setting.

Methods: The trauma series images of 50 patients were reviewed retrospectively. They were assessed for adequacy in accordance with guidelines from the Royal College of Radiologists.

Results: The trauma series images for 9 patients were found to be inadequate. Radiologist reports were available for all these 9 patients, but 2 of the reports did not indicate the inadequacy. None of the 9 reports suggested further imaging.

Conclusions: All patients presenting with cervical spine trauma should have adequate imaging and this should include a 3 view series - anterior-posterior, lateral and odontoid views. The C7-T1 junction should be visualised. Inadequate visualisation should lead to further views (like swimmer's), with progression to CT scanning if necessary.

A good 3 view series will exclude an unstable cervical spine fracture in 95% of patients. CT scans have more sensitivity and specificity than plain films and should be used in conjunction more often. All imaging should be reported on promptly by a senior member of the radiology team, along with suggestions for further imaging to ensure adequacy. These instructions should be acted upon immediately.

0228: THE HUMBLE HANDOVER BOOK: A COMPLETED AUDIT CYCLE SHOWING THAT A LOW-COST, LOW-TECH, LOW-MAINTENANCE PRE-PRINTED BOOK CAN IMPROVE ORTHOPAEDIC TRAUMA HANDOVER

Neil Eisenstein, David Hillier. *Shrewsbury and Telford NHS Trust, Telford, UK.*

Clinical Problem: Perceived poor quality of handover in trauma meetings.

Standard: Royal College of Surgeons: "Safe Handover: Guidance from the Working Time Directive working party" March 2007. This sets out the following essential handover criteria: Patient name, age, D.o.B, hospital number, location, date of admission, responsible consultant, diagnosis/presenting complaint, and significant/outstanding results.

Baseline Audit Results: 100 consecutive patient handovers. Patient name 100%, age 55%, D.o.B 87%, hospital number 98%, location 77%, date of admission 47%, responsible consultant 9%, diagnosis/presenting complaint 96%, and significant/outstanding results 7%. 0% of handovers met all essential criteria.

Practice Changed: Introduction of pre-printed book with space for the essential criteria and patient addressograph. Training for admitting on-call staff.

Re-Audit Results: 100 consecutive patient handovers. Patient name 100%, age 94%, D.o.B 99%, hospital number 99%, location 93%, date of admission 98%, responsible consultant 94%, diagnosis/presenting complaint 100%, and significant/outstanding results 70%. 63% of handovers met all essential criteria.